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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
09/160,068	09/24/98	MILLINGTON	J 60.314-039

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JOHN E CARLSON  
HOWARD & HOWARD  
1400 NORTH WOODWARD AVENUE  
SUITE 101  
BLOOMFIELD HILLS MI 48304-2856

EXAMINER

TWEEL JR, J

ART UNIT

PAPER NUMBER

2736

DATE MAILED: 12/23/99

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.  
09/160,068

Applicant(s)

Millington et al

Examiner

John Tweel

Group Art Unit  
2736



☒ Responsive to communication(s) filed on Sep 24, 1998

☐ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 35 C.D. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

## Disposition of Claim

☒ Claim(s) 1-11 is/are pending in the application

Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration

☐ Claim(s) \_\_\_\_\_ is/are allowed.

☒ Claim(s) 1-11 is/are rejected.

☐ Claim(s) \_\_\_\_\_ is/are objected to.

☐ Claims \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

☒ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some\* ☒ None of the CERTIFIED copies of the priority documents have been received.

☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\*Certified copies not received: \_\_\_\_\_

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

## Attachment(s)

☒ Notice of References Cited, PTO-892

☒ Information Disclosure Statement(s), PTO-1449, Paper No(s). 2

☐ Interview Summary, PTO-413

☒ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

— SEE OFFICE ACTION ON THE FOLLOWING PAGES —

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## DETAILED ACTION

### *Drawings*

1. This application has been filed with informal drawings which are acceptable for examination purposes only. Formal drawings will be required when the application is allowed.

### *Claim Rejections - 35 USC § 103*

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Japanese patent 3211591 in view of Japanese patent 6034382.

The display method taught by 3211591 includes a palette having a plurality of colors wherein a plurality of colors is displayed at the pixels. The lines that are displayed are "un-jagged" in relation to the angle of the displayed line on the background color wherein a first color is displayed and different shades of this first color are displayed depending on the area ratio through which the line graphic is to pass. The intensity of the color saturation is proportional to a

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portion of the pixel not lying within the ideal road line. However, this system is not explicitly suited for a road map in a navigation system.

The on-vehicle display device taught by 6034382 includes an anti-aliasing processing for a road map display system on a vehicle. Like the primary reference, it too displays a line wherein the color brightness is adjusted depending on the location of a line graphic in the display.

This reference is plain evidence that an anti-aliasing system has been in use on vehicle display systems for many years. It would have been obvious to one of ordinary skill in the art at the time the invention was made to include an anti-aliasing system of the primary reference in a vehicle display system for the purpose of using a well known and useful display system in a well known and perfectly suited environment such as the vehicle display system of the secondary reference. As for the condition that the background color be displayed if a pixel area crossing the line is less than a predetermined threshold, this property would seem to naturally follow from the fact that a line graphic must end in intensity at some point along the display from where the ideal line is located. This common sense property does not appear patentable in light of this logic.

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

**Gossett et al** [U.S. 5,742,277] describes a method for antialiasing silhouette edges.

**Denber** [U.S. 5,365,251] improves image quality by aliasing a line graphic.

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**Edelson et al** [U.S. 5,140,315] achieves aliasing by blending the colors on either side of a boundary.

5. Any inquiry concerning this communication should be directed to Examiner John Tweel at telephone number (703) 308 7826. The examiner can normally be reached on Monday-Fridays, 8:30a-5:00p.

If attempt to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeff Hofsass, can be reached on (703) 305 4717. The fax phone number for this group is (703) 308 6743.

John Tweel

December 19, 1999



JEFFERY J. HOFSSASS  
SUPERVISORY PATENT EXAMINER  
GROUP 2700